Cardiac Arrest: General

History
- Events leading to arrest
- Estimated downtime
- Past medical history
- Medications
- Existence of terminal illness
- Left Ventricular Assist Device

Signs and Symptoms
- Unresponsive
- Apneic
- Pulseless

Differential
- Medical vs. Trauma
- VF vs. Pulseless VT
- Asystole
- PEA
- Primary Cardiac event vs. Respiratory arrest or Drug Overdose
- Hypoxic vs. Non-Hypoxic

B	EMT	B
P	EMT- P	P

Decomposition
Rigor mortis
Dependent lividity

Injury incompatible with life or Specified Traumatic arrests

Do not begin resuscitation

Follow Deceased Subjects/ Dead on Arrival Protocol

YES

Criteria for Death / No Resuscitation Review DNR

NO

Begin Continuous Chest Compressions and Ventilations
Push Hard (~ 2 inches) Push Fast (~ 110 / min)
Change Compressors every 2 minutes
(Limit changes / pulses checks ≤ 5 seconds)

B — Airway: i-gel Procedure

AT ANY TIME

Return of Spontaneous Circulation

Go to Post Resuscitation Protocol

See caveat for EMS Witnessed, Non-Hypoxic Cardiac Arrest Patients with Shockable Rhythm

ALS Available

NO

B — AED

Shockable Rhythm

NO — Continue CPR for 2 Minutes Reassess and repeat

YES — Shock Delivery; Continue CPR for 2 Minutes Reassess and repeat

YES

P — Cardiac Monitor

Shockable Rhythm

NO — Follow Asystole / PEA Protocol

YES — Follow VF / Pulseless V-Tachycardia Protocol

Contact Medical Control as needed for questions/guidance

Adult Medical Protocols

Cardiac Arrest: General

Pearls

- **Effective CPR and prompt defibrillation are the keys to successful resuscitation; therefore, primary resuscitative efforts should be directed at high quality and continuous compressions with limited interruptions and early defibrillation when indicated.**

- **DO NOT HYPERVENTILATE! Ventilations are accomplished utilizing an adult BVM with just enough compression to achieve chest rise. Ventilate at 6 breaths per minute (once every 10 seconds) with continuous, uninterrupted compressions.**

- Non-Hypoxic Origin Cardiac Arrest is typically an arrest suspected of being primarily cardiac in origin, without concern for low oxygen reserves pre-arrest.
  Hypoxic Origin Cardiac Arrest Examples: Primary respiratory arrest, CHF, COPD, Smoke Inhalation, Drowning, Hanging, etc.

- **EMS Witnessed, Non-Hypoxic Cardiac Arrest Patients with Shockable Rhythm ONLY: Delay ventilations in preference to passive oxygenation for the first 6 minutes of continuous cardiac compression.**

- If functioning appropriately, the preference is to leave the i-gel in place to limit interruptions in chest compressions. If intubation is considered, do not interrupt chest compressions to place the endotracheal tube. Frequently reassess airway placement and EtCO2, especially after every move, and at transfer of care.

- **Maternal Arrest** - Treat mother per appropriate protocol with immediate and rapid transport. Place mother supine and perform Manual Left Uterine Displacement moving uterus to the patient's left side. IV/IO access preferably above diaphragm. Defibrillation is safe at all energy levels.

- Refer to the Dialysis / Renal Failure protocol caveats when faced with a dialysis / renal failure patient experiencing cardiac arrest.

- Consider hypoglycemia; measure blood glucose and treat appropriately.